Report Date: 30 Jun 2014

Summary Report for Individual Task
551-88L-3054
Troubleshoot Fire Fighting Equipment
Status: Approved

Condition: Given firefighting equipment aboard a vessel, at sea, at anchor or moored alongside a pier, day or night, under all sea and weather conditions, while wearing appropriate PPE, (i.e. hearing protection, Nitrile gloves, eye protection, etc.), with a lock out tag out kit and a marine rail tool box.

Standard: The Soldier correctly conducts troubleshooting procedures pertaining to firefighting equipment aboard an Army vessel, IAW the appropriate Technical Manual and local SOPs, without injury to self or others and without damage to equipment.

Special Condition: None

Safety Risk: Low

MOPP 4:

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: None

Notes: None

Performance Steps

1. Demonstrate troubleshooting procedures for fire station equipment.

    a. Water leaks from fire station plug when closed.

        (1) Possible cause(s).

            (a) Valve not closing all the way.

            (b) Corrosion on valve seat.

            (c) Debris in valve seat.

        (2) Corrective action(s)

            (a) Check valve stem threads for blockage.

            (b) Rebuild or replace valve.

            (c) Flush valve.

    b. Water leaks from Y-gate when valve are closed.

        (1) Possible cause(s).

            (a) Ball valves not closing fully.

            (b) Ball valves worn.

            (c) Debris in ball valve.

        (2) Corrective action(s).

            (a) Check for loose connection between ball and stem.

            (b) Rebuild or replace Y-gate.

            (c) Flush Y-gate.

    c. Water leaks from fire nozzle when bale is closed.

        (1) Possible cause(s).

            (a) Control ball of nozzle not closing fully.

            (b) Control ball of nozzle worn.

            (c) Debris in control ball of nozzle.

        (2) Corrective action(s).

(a) Check for loose connection between bale and control ball.

(b) Rebuild or replace nozzle.

(c) Flush nozzle.

d. Water leaks at hose couplings.

(1) Possible cause(s).

(a) Loose couplings.

(b) Defective O-rings.

(c) Damaged threads on couplings not allowing complete tightening.

(2) Corrective action(s)

(a) Tighten coupling.

(b) Replace O-ring.

(c) Replace hose.

2. Demonstrate trouble shooting procedures for the fire monitor.

a. Fire monitor will not swivel.

(1) Possible cause(s).

(a) Arms are locked.

(b) Corrosion and/or salt build up on swivel.

(2) Corrective action(s).

(a) Loosen the arms.

(b) Remove monitor from mount and clean salt build up and/or corrosion.

b. Water leaks from monitor when control valve is closed.

(1) Possible cause(s).

(a) Control valve not closing fully.

(b) Worn control valve.

(c) Debris in control valve.

(2) Corrective action(s).

(a) Check for loose connection between stem and control ball.

(b) Rebuild or replace valve.

(c) Flush monitor.

c. No or little water discharge at monitor.

(1) Possible cause(s).

(a) System misalignment.

(b) Plugged monitor.

(c) Not enough water pressure.

(2) Corrective action(s).

(a) Ensure system is aligned in accordance with vessel SOP.

(b) Check for debris in monitor.

(c) Ensure required fire pumps are energized in accordance with vessels SOP.

3. Demonstrate trouble shooting procedures for the Self Contained Breathing Apparatus (SCBA).

a. Constant airflow with face piece donned.

(1) Possible cause(s).

(a) Purge valve open.

(b) Face piece not properly adjusted to face.

(c) Mask-mounted regulator malfunction

(2) Corrective action(s).

(a) Close purge valve by turning fully clockwise.

(b) Readjust face piece and head harness IAW paragraph 2.3.1.1 of TM-10-4240-343-13&P.

(c) Remove and install mask-mounted regulator IAW paragraph 6.7.2 of TM-10-4240-343-13&P.

b. No air or excessive resistance upon inhalation.

(1) Possible cause(s).

(a) Cylinder valve not fully open.

(b) Cylinder empty.

(c) Restriction in low-pressure hose.

(d) Mask-mounted regulator malfunction.

(e) Pressure reducer malfunction.

(2) Corrective action(s).

(a) Open cylinder valve by turning handwheel fully counterclockwise.

(b) Check dual-reading pressure indicator for correct pressure. If empty, replenish air IAW paragraph 2.3.2 of TM-10-4240-343-13&P.

(c) Check for kink or obstruction in low-pressure hose.

(d) Open purge valve by turning fully counterclockwise. If free flow of air begins, remove and install mask-mounted regulator IAW paragraph 6.7.2 of TM-10-4240-343-13&P.

(e) If no free flow of air begins, remove and install pressure reducer IAW paragraph 6.8.5 of TM-10-4240-343-13&P.

c. System Leakage.

(1) Possible cause(s).

(a) Leakage at cylinder valve and hand coupling connection.

(b) Leakage at RIC/UAC assembly and pressure reducer connection.

(c) Leakage at Visualert mounting block and pressure reducer connection.

(d) Leakage at low-pressure hose and pressure reducer connection.

(e) Leakage in remote pressure indicator at Visualert mounting block connection.

(f) Leakage in RIC/UAC assembly.

(g) Leakage at remote pressure indicator and indicator line connection.

(h) Leakage around pressure reducer other than previously identified.

(2) Corrective action(s).

(a) Tighten hand coupling (hand tighten only). If leakage continues, inspect respirator seat gasket for damage or excessive wear. Remove and install IAW paragraph 6.8.3 of TM-10-4240-343-13&P.

(b) Remove RIC/UAC assembly from pressure reducer and install preformed packing and the packing retainer IAW paragraph 6.8.4 of TM-10-4240-343-13&P.

(c) Remove mounting probe, inspect, and install Visualert mounting block IAW paragraph 6.8.1 of TM-10-4240-343-13&P.

(d) Remove, inspect, and install mask-mounted regulator IAW paragraph 6.7.2 of TM-10-4240-343-13&P.

(e) Replace remote pressure indicator IAW paragraph 6.8.2 of TM-10-4240-343-13&P.

(f) Replace RIC/UAC assembly IAW paragraph 6.8.4 of TM-10-4240-343-13&P.

(g) Replace remote pressure indicator IAW paragraph 6.8. of TM-10-4240-343-13&P.2.

(h) Replace pressure reducer IAW paragraph 6.8.5 of TM-10-4240-343-13&P.

d. Face piece leakage.

(1) Possible cause(s).

(a) Face piece not properly sealed to face.

(b) Leakage at face piece and mask-mounted regulator connection.

(2) Corrective action(s).

(a) Readjust face piece and head harness IAW paragraph 2.3.1.1 steps f through l of TM-10-4240-343-13&P.

(b) Replace mask-mounting regulator sealing gasket IAW paragraph 6.7.1 of TM-10-4240-343-13&P.

e. Excessive resistance on exhalation.

(1) Possible cause - Sticking exhalation valve (mask-mounted regulator).

(2) Corrective action - Clean mask-mounted regulator IAW preventive maintenance. If problems persist, replace mask-mounted regulator IAW paragraph 6.7.2 of TM-10-4240-343-13&P.

f. Airflow does not stop when air saver switch is fully depressed (closed).

(1) Possible cause - Mask-mounted regulator malfunction.

(2) Corrective action - Close purge valve by turning clockwise. If problem persists, replace mask-mounted regulator IAW paragraph 6.7.2 of TM-10-4240-343-13&P.

g. Vibralert activates above 1,125 PSI.

(1) Possible cause - Pressure reducer malfunction.

(2) Corrective action - Replace pressure reducer IAW paragraph 6.8.5 of TM-10-4240-343-13&P.

h. LED on HUD not functioning.

(1) Possible cause(s).

(a) Low or depleted battery.

(b) Loose cable connection.

(c) Visualert malfunction.

(2) Corrective action(s).

(a) Replace battery.

(b) Check HUD electrical cable connection at Visualert.

(c) Replace Visualert IAW paragraph 6.8.1 of TM-10-4240-343-13&P.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: None

Evaluation Preparation: None

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Demonstrated troubleshooting procedures for fire station equipment.			
a. Water leaks from fire station plug when closed.			
b. Water leaks from Y-gate when valve are closed.			
c. Water leaks from fire nozzle when bale is closed.			
d. Water leaks at hose couplings.			
2. Demonstrated trouble shooting procedures for the fire monitor.			
a. Fire monitor will not swivel.			
b. Water leaks from monitor when control valve is closed.			
c. No or little water discharge at monitor.			
3. Demonstrated trouble shooting procedures for the Self Contained Breathing Apparatus (SCBA).			
a. Constant airflow with face piece donned.			
b. No air or excessive resistance upon inhalation.			
c. System Leakage.			
d. Face piece leakage.			
e. Excessive resistance on exhalation.			
f. Airflow does not stop when air saver switch is fully depressed (closed).			
g. Vibralert activates above 1,125 PSI.			
h. LED on HUD not functioning.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TM 10-4240-343-13&P	FIELD MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR SELF-CONTAINED BREATHING APPARATUS (SCBA) (45 MINUTE) (NSN: 4240-01-545-9605)	No	No
	TM 55-1905-217-12	Operator's and Organizational Maintenance Manual: Landing Craft, Mechanized, Steel, DED, Overall Length 74 Feet, Mod 1, Mark VIII, Navy Design LCM-8, Hull Nos. 8500-8560 and 8580-8618 (NSN 1905-00-935-6057) (Reprinted W/Basic Incl C1-3)	No	No
	TM 55-1905-223-10	Operator's Manual for Landing Craft, Utility (LCU 2000 CLASS) (NSN 1905-01-154-1191) (Reprinted W/Basic Incl C1-9) (This item is included on EM 0273)	No	No
	TM 55-1905-223-SDC	SHIPBOARD DAMAGE CONTROL MANUAL FOR LANDING CRAFT UTILITY (LUC) (NSN 1905-01-154-1191)	No	No
	TM 55-1915-200-10	Operator's Manual for Logistic Support Vessel (LSV) (NSN 1915-01-153-8801) (Reprinted W/Basic Incl C1-6)	No	No
	TM 55-1915-200-SDC	SHIPBOARD DAMAGE CONTROL MANUAL FOR LOGISTIC SUPPORT VESSEL (LSV) (NSN 1915-01-153-8801)	No	No
	TM 55-1915-254-10-1	OPERATOR'S MANUAL FOR LOGISTICS SUPPORT VESSEL (LSV-7 & -8)	No	No
	TM 55-1915-254-10-2	OPERATOR'S MANUAL FOR LOGISTICS SUPPORT VESSEL (LSV-7 & -8)	No	No
	TM 55-1925-204-12	OPERATORS AND ORGANIZATIONAL MAINTENANCE MANUAL FOR TUG, HARBOR, DIESEL, STEEL, 1,200 HP, 100 FOOT DESIGN 3006, FLIGHT ONE (NSN 1925-00-375-3003) (REPRINTED W/BASIC INCL C1-5)	No	No
	TM 55-1925-236-12	OPERATOR AND UNIT MAINTENANCE MANUAL FOR SMALL TUG (ST) (NSN 1925-01-435-1713)	No	No
	TM 55-1925-254-14&P	OPERATOR, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL	No	No
	TM 55-1925-273-10-1	Operator's Manual For Inland Coastal Large Tug (LT) (NSN 1925-01-509-7013)(EIC XAG) (This item is included on EM 0272)	No	No
	TM 55-1925-273-10-2	Operator's Manual for Inland and Coastal Large Tug (LT) (NSN 1925-01-509-7013) (EIC XAG) (This item is included on EM 0272)	No	No
	TM 55-1925-273-SDC	SHIPBOARD DAMAGE CONTROL MANUAL FOR INLAND AND COASTAL LARGE TUG (LT)	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-2049	Maintain Firefighting Equipment	551 - Transportation (Individual)	Approved
551-8ST-3017	Conduct Maintenance of Portable Fire Fighting Equipment	551 - Transportation (Individual)	Approved

Supported Individual Tasks :

Task Number	Title	Proponent	Status
551-8ST-3017	Conduct Maintenance of Portable Fire Fighting Equipment	551 - Transportation (Individual)	Approved
551-88L-2049	Maintain Firefighting Equipment	551 - Transportation (Individual)	Approved

Supported Collective Tasks : None

ICTL Data :

ICTL Title	Personnel Type	MOS Data
88L30 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL3, Duty Pos: TFR, LIC: EN
88L40 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL4, Duty Pos: TGB, LIC: EN, SQI: O